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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,872	07/24/2001	Yasumichi Kuwayama	Q65548	4044

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SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

GUSHI, ROSS N

ART UNIT PAPER NUMBER

2833

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,872

Applicant(s)

KUWAYAMA ET AL.

Examiner

Ross N. Gushi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7,9, and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch et al ("Koch") in view of Weisenburger.

Koch discloses an electric connecting terminal 1 capable of being connected to a flat circuit body comprising a plane portion, a pair of piercing portions 13 erected from opposite side edges of the plane portion adapted to penetrate through a coating and a conductor of the flat circuit body and fold tips thereof in such a direction as to approach each other, wherein the piercing portions include a root portion and a distal portion.

Koch does not show an internal surface of the distal portion being inclined with respect to an internal surface of the root portion so that the distal portion is tapered.

Weisenburger discloses an electric terminal 11 capable of being connected to a flat circuit body comprising a plane portion and a pair of piercing portions 15 where an internal surface of the distal portions are inclined with respect to an internal surface of the root portion so that the distal portion is tapered (see figures 4, 5, 6). At the time of the invention, it would have been obvious to taper the tips of the Koch piercing portions as taught in Weisenburger. The suggestion or motivation for doing so would have been

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to facilitate piercing of the flat circuit body as taught in Weisenburger and as is well known in the art.

Per claim 2, Weisenburger discloses the outer surface of the piercing portion as being tapered.

Per claims 4, 6, 7, 9, and 10 the Koch (and Weisenburger) first portions have a constant width in the longitudinal direction and the Weisenburger taper sections are tapered on all sides.

Response to Arguments

Applicant argues that there is no disclosure in Koch of the tongues being pressed through both a coating and a conductor "as set forth in claims 1 and 4." Applicant in fact does not claim that the tongues are pressed through coating and conductor. (see claims 1 and 4).

Applicant argues that Koch does not suggest that additional tapering is required. The examiner maintains that the tapering would have been obvious to facilitate piercing of the flat circuit body as taught in Weisenburger and as is well known in the art. Applicant argues that the operation of the Koch connector would be adversely affected. The examiner disagrees. Whether or not the tapered surface would press against the arm 11 would be dependent on the shape and configuration of the particular caulking device (which is not shown). There is no basis for assuming that the caulking device would not press the entire terminal, including the tapered portion, into a secure engagement with the arm 11. Rather, it would have been obvious to have tongues deformed such that they would perform their intended function. Furthermore, even if

one assumes that applicant's modified figure 4 of Koch is correct, the examiner is not persuaded that that the device would not operate as intended. The examiner maintains that the arm 11 would still be fixed securely and the terminal would be less likely to damage the foil during the engagement of the foil and the terminal. The examiner disagrees with applicant's argument that the proposed modification would have no benefit. The motivation would have been to facilitate piercing of the flat circuit body and prevent damage to the terminal, as taught in Wiesenburger.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (703) 306-4508. If attempts to reach the examiner by phone are unsuccessful, the examiner's

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supervisor, Paula A. Bradley, can be reached at (703) 308-2319. The phone number for the Group's facsimile is (703) 308-7766

rng

A handwritten signature in black ink, appearing to read "Ron [unclear]". The signature is written in a cursive, flowing style.